8-35-1 Cold Weather Hot Mix Asphalt (HMA) Paving Letter

Updated April 26, 2021

1.1 Originator

Project Development Section

1.2 Introduction

This section provides guidance on when and how to issue a cold weather HMA paving letter and what to include in the letter.

1.3 Process

Projects let in January 2015 or later need to be handled differently than those of the past. <u>Standard Specifications 450.3.2</u>, previously in ASP-6, removed the October 15th to May 1st HMA paving date restriction and replaced it with two sets of dates in which the paving should take place. It also requires the contractor to submit a cold weather paving plan for HMA at the preconstruction meeting. The plan must be accepted by the engineer in writing, and the contractor must follow the plan when paving lower layers at air temperatures between 32° and 40° F or paving upper layers at air temperatures between 36° and 40° F. Changes to the plan need to be submitted to the engineer in writing. <u>CMM 4-53</u> describes the northern and southern asphalt zones of the state.

The new specification uses the word "should", so it does not restrict a contractor from paving outside the mentioned dates. The new specification does include minimum ambient air temperature requirements, 32° F for lower layers and 36° F for upper layers. If a contractor wants to pave at temperatures lower than these prescribed minimum temperatures (low-temperature paving), they need to get the department's permission in writing to pave at low-temperatures. This applies to HMA pavement and asphaltic surface items.

Minimum measures include using a warm mix additive from the department <u>Approved Products List</u> and additional rollers during compaction. Once cold weather paving has begun, the additional measures are to continue for the entire work shift regardless of the current temperature.

Standard Specifications 450.5.2(3) addresses responsibility for the pavement quality – the contractor is responsible for the quality of the pavement unless the paving is performed at low-temperatures, at the direction of the department, and the low-temperature paving was due to an excusable compensable delay (The contractor would have been paving at or above prescribed temperatures "but for" a delay caused by the department. ONLY when all of these conditions are satisfied will the department relieve the contractor of cold weather-related defects, density disincentive, and IRI disincentive.)

If project staff decide that low-temperature paving should be allowed, the project manager will discuss this with the PDS supervisor, and then email the contract specialist a request to issue a letter allowing low-temperature paving. The email to the contract specialist should provide the required information for the letter, and at a minimum address the following when allowing the contractor to pave outside the prescribed temperature limits:

- State whether the department intends to waive or enforce the conditional requirements prescribed in <u>Standard Specifications 450.3.2.1 (3)</u>. (No frost in base or subgrade, a prepared stable base and foundation, etc.)
- State which specific dates the department will allow the low-temperature paving.
- State what the lowest temperature is that the department will allow HMA paving for each layer.
- State if any additional cold weather paving measures are required beyond those in the submitted cold weather paving plan.
- If HMA is a temporary road / pavement where contractor is responsible for maintenance, a reference to Standard Specifications 104.6.2(3) or 465.3.4 should be included.
- State whether the contractor is responsible for the quality of the pavement, including cold weather defects, density and IRI. State if any of these requirements will be waived. This requires a determination of whether the paving is being performed at low-temperatures (below 32° F for lower layers and below 36° F for upper layer) due to an excusable compensable delay.
- State if there are any other project specific issues beyond these that also need to be addressed.

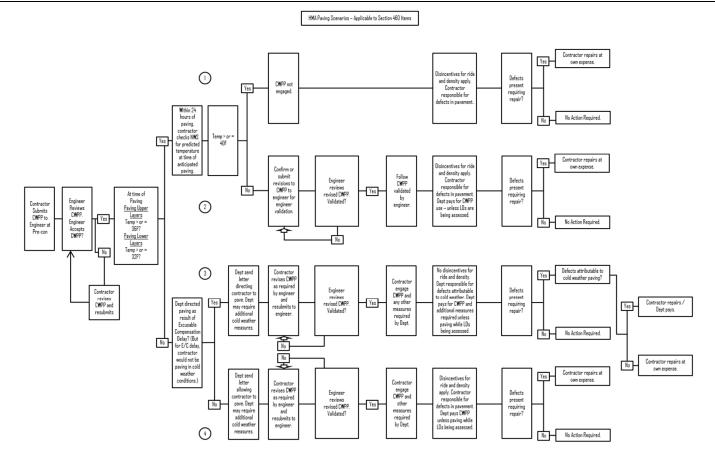


Figure 1.1 - Cold Weather HMA Paving Flowchart

1.4 References

Cold Weather Paving Flowchart

Standard Specifications 450

CMM 4-53

Approved Products List

SW Region Contract Specialist (La Crosse) - Sharayah Sikkema, sharayah.sikkema.dot.wi.gov

SW Region Contract Specialist (Madison) - currently vacant

SW Region Asphalt Specialist (La Crosse) - Steve Ames, steve.ames@dot.wi.gov

SW Region Asphalt Specialist (Madison) - Matt Smith, matt.smith@dot.wi.gov

Construction SWIG Review Team (see SWIG 8-95-5)

Barb Gassen 1/10/2017
Author Date